

**Dataset:** Rock wall manipulation experiment conducted in Bodega Bay, CA from 2010-2011

**Project(s):** Long-term and interactive effects of seaweed diversity and herbivory on intertidal community structure and functioning (Intertidal Diversity)

**Abstract:** These data summarize results from a field experiment testing effects of gastropod grazer diversity and substrate heterogeneity generated by barnacles on intertidal algal succession. The manipulation experiment was conducted on a vertical rock wall in the mid-high intertidal zone of Bodega Marine Reserve, Bodega Bay, CA. Surveys were conducted from during 2010-2011. On each survey date, grazer abundance was recorded and the percent cover of algal taxa was visually assessed. For a complete list of measurements, refer to the supplemental document 'Field\_names.pdf', and a full dataset description is included in the supplemental file 'Dataset\_description.pdf'. The most current version of this dataset is available at: <http://www.bco-dmo.org/dataset/641692>

**Description:** Grazer diversity-substrate heterogeneity manipulation experiment in Bodega Bay, CA.

These data summarize results from a field experiment testing effects of gastropod grazer diversity and substrate heterogeneity generated by barnacles on intertidal algal succession. The manipulation experiment was conducted in Bodega Bay, CA from 2010-2011.

**Acquisition** The experiment was conducted on a vertical rock wall in the mid-high intertidal

**Description:** zone of Bodega Marine Reserve, Bodega Bay, CA, USA. Grazer diversity and substrate heterogeneity were factorially manipulated in 20cm x 20cm plots. Grazers were manipulated via direct removals from plots in order to generate monocultures of each of three gastropod taxa, the limpets, *Lottia digitalis* and *Lottia scabra*, and the snails *Littorina* spp. (*L. plena* and *L. scutulata*), along with an unmanipulated polyculture with all three gastropod grazers. Substrate heterogeneity was manipulated by scraping barnacle covered areas from the rock surface. Three barnacle treatments were used: two homogeneous treatments (full = no barnacle removal, none = all barnacles removed) and one heterogeneous treatment (half = barnacles removed from one half of plot but left intact on the other half). Grazer and substrate treatments were maintained over time by counting and removing unwanted grazers from plots and by removing new barnacle recruits from previously cleared areas. On each survey date, grazer abundance and visually-assessed percent cover of algal taxa were recorded.

*Reference:*

Matthew A. Whalen, Kristin M. Aquilino, John J. Stachowicz. 2016. Grazer diversity interacts with biogenic habitat heterogeneity to accelerate intertidal algal

succession. Ecology. in press.

**Processing** BCO-DMO Processing:

**Description:** - added location, lat, and lon columns (taken from metadata);  
- added month, day, and year columns;  
- changed date format to YYYYmmdd;  
- modified parameter names to conform with BCO-DMO naming conventions.

## Deployment Information

**Deployment description for Bodega Marine Reserve BodegaBay\_Stachowicz**

rocky intertidal

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